

What Is Claimed Is:

1 1. An apparatus for multiple host access to a storage
2 medium, comprising:

3 a first hot plug/hot swap interface for interfacing to
4 a first host;

5 a second hot plug/hot swap interface for interfacing
6 to a second host;

7 a storage interface for interfacing to said storage
8 medium; and

9 a control circuit for controlling access to said storage
10 medium from said first host and said second host,
11 so that, when only one of said first host and said
12 second host is effectively interfaced with said
13 apparatus, said storage medium is appended to said
14 effectively interfaced host and said apparatus
15 provides access to said storage medium from said
16 effectively interfaced host, and when both said
17 first host and said second host are effectively
18 interfaced with said apparatus, said storage medium
19 is appended to one of said first host and said second
20 host and said apparatus provides bridging between
21 said first host and said second host as well as access
22 to said storage medium from both said first host and
23 said second host.

1 2. The apparatus for multiple host access to a storage
2 medium of claim 1, wherein when both said first host and
3 said second host are effectively interfaced with the
4 apparatus, said storage medium is appended to the first
5 effectively interfaced one of said first host and said
6 second host.

1 3. The apparatus for multiple host access to a storage
2 medium of claim 1, wherein said control circuit comprises
3 a detecting circuit for detecting interface states of said
4 first host and said second host and a switching circuit for
5 switching the appending of said storage medium to said first
6 host or to said second host.

1 4. The apparatus for multiple host access to a storage
2 medium of claim 1, wherein said first hot plug/hot swap
3 interface and said second hot plug/hot swap interface are
4 USB (Universal Serial Bus) interfaces.

1 5. The apparatus for multiple host access to a storage
2 medium of claim 1, wherein said first hot plug/hot swap
3 interface and said second hot plug/hot swap interface are
4 IEEE 1394 interfaces.

1 6. The apparatus for multiple host access to a storage
2 medium of claim 1, wherein said storage medium is a mass
3 storage device.

1 7. The apparatus for multiple host access to a storage
2 medium of claim 1, wherein said storage medium is a memory
3 device.

1 8. The apparatus for multiple host access to a storage
2 medium of claim 1, wherein said storage medium is a hard
3 disk drive.

1 9. The apparatus for multiple host access to a storage
2 medium of claim 1, further comprising a FIFO (First-in
3 First-out) unit.

1 10. An apparatus for multiple host access to a storage

2 medium, comprising:

3 a plurality of hot plug/hot swap interfaces for
4 respectively interfacing to a plurality of hosts;
5 at least one storage interface for interfacing to at
6 least one storage medium; and
7 a control circuit for controlling access to said at least
8 one storage medium from said plurality of hosts, so
9 that, when only one of said plurality of hosts is
10 effectively interfaced with said apparatus, said at
11 least one storage medium is appended to said
12 effectively interfaced host and said apparatus
13 provides access to said at least one storage medium
14 from said effectively interfaced host, and when two
15 or more of said plurality of hosts are effectively
16 interfaced with said apparatus, said at least one
17 storage medium is appended to one of said effectively
18 interfaced hosts and said apparatus provides
19 bridging between said effectively interfaced hosts
20 as well as access to said at least one storage medium
21 from said effectively interfaced hosts.

1 11. The apparatus for multiple host access to a storage
2 medium of claim 10, wherein, said apparatus comprises a
3 plurality of storage interfaces for interfacing to a
4 plurality of storage media.

1 12. The apparatus for multiple host access to a storage
2 medium of claim 10, wherein, when two or more of said
3 plurality of hosts are effectively interfaced with said
4 apparatus, said at least one storage medium is appended to
5 the first effectively interfaced one of said effectively
6 interfaced hosts.

1 13. The apparatus for multiple host access to a storage
2 medium of claim 10, wherein, said control circuit comprises
3 a detecting circuit for detecting interface states of said
4 plurality of hosts and a switching circuit for switching the
5 appending of said at least one storage medium to said
6 plurality of hosts.

1 14. The apparatus for multiple host access to a storage
2 medium of claim 10, wherein, said plurality of hot plug/hot
3 swap interfaces are USB (Universal Serial Bus) interfaces.

1 15. The apparatus for multiple host access to a storage
2 medium of claim 10, wherein, said plurality of hot plug/hot
3 swap interfaces are IEEE 1394 interfaces.

1 16. The apparatus for multiple host access to a storage
2 medium of claim 10, wherein, said at least one storage medium
3 is a mass storage device.

1 17. The apparatus for multiple host access to a storage
2 medium of claim 10, wherein, said at least one storage medium
3 is a memory device.

1 18. The apparatus for multiple host access to a storage
2 medium of claim 10, wherein, said at least one storage medium
3 is a hard disk drive.

1 19. The apparatus for multiple host access to a storage
2 medium of claim 10, further comprising a FIFO (First-in
3 First-out) unit.

1 20. An apparatus for multiple host access to a storage
2 medium, comprising:

3 a first connector for connecting to a first host, said

4 first connector including a first hot plug/hot swap
5 interface for interfacing to a first host;
6 a second connector including a second hot plug/hot swap
7 interface for interfacing to a second host;
8 a cable having at one end a third connector for
9 connecting to said second connector and at the other
10 end a forth connector for connecting to said second
11 host;
12 a storage interface for interfacing to said storage
13 medium; and
14 a control circuit for controlling access to said storage
15 medium from said first host and said second host,
16 so that, when only one of said first host and said
17 second host is effectively interfaced with said
18 apparatus, said storage medium is appended to said
19 effectively interfaced host and said apparatus
20 provides access to said storage medium from said
21 effectively interfaced host, and when both said
22 first host and said second host are effectively
23 interfaced with said apparatus, said storage medium
24 is appended to one of said first host and said second
25 host and said apparatus provides bridging between
26 said first host and said second host as well as access
27 to said storage medium from both said first host and
28 said second host.

1 21. The apparatus for multiple host access to a storage
2 medium of claim 20, wherein said first, second, third and
3 forth connectors are USB (Universal Serial Bus) connectors.

1 22. The apparatus for multiple host access to a storage
2 medium of claim 20, wherein said first, second, third and
3 forth connectors are IEEE 1394 connectors.